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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,052	11/23/1999	SEISHI SUEHIRA	1075.1124/JD	3304

21171 7590 01/29/2004

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EXAMINER

NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/447,052

Applicant(s)

SUEHIRA, SEISHI

Examiner

Chau Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Amendment A, received on 09/04/2003, has been entered. Claims 1-48 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,377,956 B1 to Hsu et al., issued April 23, 2002, filed February 22, 1999 in view World Wide Web Consortium, *XML Schema Part I: Structures*, W3C Working Draft (May 6, 1999). With respect to the rejection of each dependent claim below, the preceding rejection(s) of the relevant base claim(s) is incorporated therein.

Regarding **independent claim 1**, Hsu et al. teach setting in advance an original document storage directory for storing the non-structured documents inasmuch as they teach specifying database tables or external files for the storage of component documents. (Hsu et al., col. 3, lines 20-44 and col. 7, lines 26-32: the component document retriever for storing the component documents in various subdirectories of a machine-specific directory) Hsu et al. also teach setting in advance a structured

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document directory area for storing structured documents obtained by conversion of the non-structured documents. (Hsu et al., col. 8, lines 16-18: "In the media preparation process, all source documents are processed and converted into standard formats, in particular, SGML, and are stored in the document database.")

Further, Hsu et al. do not explicitly teach but it would have been obvious to one of ordinary skill in the art to store the non-structured document into the original storage directory each time it was prepared or edited because it would have been obvious to one of ordinary skill that it would be desirable to have the most updated version of the non-structured document available for conversion to a structured document. (Hsu et al., col. 8, lines 16-18, quoted above.)

Further, Hsu et al. teach converting non-structured documents into structured documents and storing them in the structured document storage directory. (Hsu et al., col. 3, lines 20-44 and col. 8, lines 16-18.)

Further, Hsu et al. disclose a configuration process that assembles a set of related product documents may be automated more efficiently and effectively (col. 7, line 33 – col. 8, line 25). However, Hsu et al. do not teach acquiring document names of the structured documents and preparing corresponding entity declarations referring to the structured documents. However, *XML Schema Part I* teaches in section 3.6.2 on page 38 external parsed entities, "a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the parsed entity." Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured

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documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary skill in the art to extend Hsu et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

Further, Hsu et al. disclose do not teach preparing the hub document based on the entity declarations regarding the structured documents. However, *XML Schema Part I* in the example in section 3.6.2 on page 39 depicts a hub document based on the entity declarations regarding the structured documents. Moreover, one of ordinary skill in the art would have recognized that basing a hub document on the entity declarations would have provided the benefit of flexible and efficient document production, allowing reuse of components in different documents and ensuring that the most up-to-date versions of components were used. Therefore, it would have been obvious to one of ordinary skill in the art to prepare the hub document based on the entity declarations regarding the structured documents.

Regarding **dependent claim 2**, Hsu et al. teach an attachment file storage area set in advance, and storing attachment files into the storage directory, inasmuch as they teach the original file storage directory as discussed above regarding claim 1 and further state that “[m]edia files, which are also document objects, are also managed in the same way as component documents.” (Hsu et al., col. 3, lines 20-44 and col. 7, lines 25-26.) Further, Hsu et al. do not teach preparing entity declarations for the attachment file or preparing the hub document based on the entity declarations for the

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attachment files as well as the entity declarations for the structured documents, but these elements would have been obvious to one of ordinary skill in the art in view of *XML Schema Part 1* under the same rationale stated above regarding claim 1 for the obviousness of creating entity declarations and preparing the hub document based on the entity declarations regarding the structured documents.

Regarding **dependent claim 3**, the rejection of claim 2 above is fully incorporated herein. Further, Hsu et al. do not teach setting in advance an entity declaration storage directory. However, in view of the obviousness of using entity declarations, discussed above regarding claim 1, it further would have been obvious to one of ordinary skill in the art to have set in advance an entity storage area because one of ordinary skill would have recognized the benefit of having a central storage area from which entity declarations could be accessed and used for multiple documents.

Regarding **dependent claims 4-6**, Hsu et al. do not teach the entity declarations of the structured documents having file names corresponding to the file names of the original unstructured document. However, one of ordinary skill in the art would have recognized that giving entity declarations the same names as the original unstructured document would have had the benefit of making clear to what original document the entity declaration referred, and therefore the step recited in these claims would have been obvious to one of ordinary skill in the art.

Regarding **dependent claims 7-12**, Hsu et al. do not teach the entity declarations for the attachment files having file names corresponding to the file names of the non-structured documents to which the attachment files are attached. However,

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one of ordinary skill in the art would have recognized that giving attachment entity declarations the same names as the original unstructured document would have had the benefit of making clear to what original document the attachment was attached, and therefore the step recited in these claims would have been obvious to one of ordinary skill in the art.

Regarding **dependent claims 13-24**, Hsu et al. teach the attachment files being graphic files including graphic information. (Hsu et al., col. 7, lines 61-65: "For each component document, the author also prepares for all needed multimedia files for diagrams, images, drawings, etc. in some standard formats such as CGM, TIFF, GIF, etc., which may be incorporated in the SGML files.")

Regarding **dependent claims 24-48**, Hsu et al. teach that the structured documents a Standard Generalized Markup Language (SGML) documents whose structure is defined by a Document Type Definition (DTD). (Hsu et al., col. 7, lines 33-37: "Component documents are preferably represented in SGML (See SGML: Standard Generalized Markup Language, ISO/IEC 8879:1986). SGML is a meta-language for defining document structures, referred to as Document Type Definition (DTD). An SGML document structure is an instance of its associated DTD.")

Response to Arguments

In the remarks, Applicant argued in substance that

(A) Prior art does not discuss the feature in the present claims of converting documents "in the original document storage directory", and "automatically acquiring document names stored in the structured document storage directory and preparing corresponding entity declarations refereeing to the structured documents", where the structured documents are in the structured document storage directory.

As to point (A), Hsu et al. disclose setting in advance an original document storage directory for storing the non-structured documents inasmuch as they teach specifying database tables or external files for the storage of component documents. (Hsu et al., col. 3, lines 20-44 and col. 7, lines 26-32: the component document retriever for storing the component documents in various subdirectories of a machine-specific directory) Hsu et al. also teach setting in advance a structured document directory area for storing structured documents obtained by conversion of the non-structured documents. (Hsu et al., col. 8, lines 16-18: "In the media preparation process, all source documents are processed and converted into standard formats, in particular, SGML, and are stored in the document database.")

Further, Hsu et al. do not explicitly teach but it would have been obvious to one of ordinary skill in the art to store the non-structured document into the original storage

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directory each time it was prepared or edited because it would have been obvious to one of ordinary skill that it would be desirable to have the most updated version of the non-structured document available for conversion to a structured document. (Hsu et al., col. 8, lines 16-18, quoted above.)

Further, Hsu et al. teach converting non-structured documents into structured documents and storing them in the structured document storage directory. (Hsu et al., col. 3, lines 20-44 and col. 8, lines 16-18.)

Further, Hsu et al. disclose a configuration process that assembles a set of related product documents may be automated more efficiently and effectively (col. 7, line 33 – col. 8, line 25). However, Hsu et al. do not teach acquiring document names of the structured documents and preparing corresponding entity declarations referring to the structured documents. However, *XML Schema Part I* teaches in section 3.6.2 on page 38 external parsed entities, “a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the parsed entity.” Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary skill in the art to extend Hsu et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

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(B) Prior art does not teach or suggest a hub document.

As to point (B), Applicant described "A hub document is a discrete structured document, for example an SGML document" in the Amendment page 13, lines 8-9. Hsu et al. disclose component documents are preferably represented in SGML, which is a meta-language for defining document structures (col. 7, line 33 – col. 8, line 9).

(C) Prior art does not provide a motive found in the prior art that motivates the combining the cited prior art references.

As to point (C), In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Hsu et al. do not teach acquiring document names of the structured documents and preparing corresponding entity declarations referring to the structured documents. However, *XML Schema Part 1* teaches in section 3.6.2 on page 38 external parsed entities, "a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the

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parsed entity.” Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary skill in the art to extend Hsu et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Number	Name	Issue Date	File Date	
6,507,858 B1	Kanerva et al.	1/14/03	2/25/98	
6,490,603 B1	Keenan et al.	12/3/02	3/19/99	
6,202,072 B1	Kuwahara	3/13/01	12/5/97	
6,101,511	DeRose et al.	8/8/00	7/19/91	
6,014,680	Sato et al.	1/11/00	8/29/96	
5,655,130	Dodge et al.	8/5/97	10/14/94	

5. World Wide Web Consortium, *Document Definition Markup Language (DDML) Specification, Version 1.0*, W3C Note (January 19, 1999). See especially section 2.6.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 305-4639. The examiner can normally be reached at 8:00 am – 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3230.

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Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20131

Or Faxed to:

(703) 872-9306, (for **formal communications**; please mark
"EXPEDITE PROCEDURE").

Or:


(703) 746-7240 (for **informal or draft communications**, please label
"PROPOSED" or "DRAFT").

Or:

(703) 872-9306 (for **After Final Communications**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Chau Nguyen
Patent Examiner
Art Unit 2176



SANJIV SHAH
PRIMARY EXAMINER